

line 28, change “i.e.” to --i.e.--; and

line 35, after “Thus”, insert a comma --,--.

Page 15, line 19, change “neighbouring” to --neighboring--;

line 23, change “neighbouring” to --neighboring--; and change “primary” to --first--;

line 29, change “neighbouring” to --neighboring--;

line 30, change “neighbouring” to --neighboring--; and

line 34, change “neighbouring” to --neighboring--.

Page 16, line 9, change “neighbouring” to --neighboring--.

Page 17, line 4, delete “means of”.

Page 19, line 28, delete “means of”.

Page 22, line 10, change “recognises” to --recognizes--.

**IN THE CLAIMS:**

Please amend claims 1-15 as follows:

1. (Amended) A cellular radio network [comprising] including allocated radio frequencies reused in cells, [characterized by] comprising:

said allocated radio frequencies being divided into regular radio frequencies for which lower frequency reuse is utilized to achieve a seamless overall coverage, and super-reuse frequencies to which high frequency reuse is applied to provide a high traffic carrying capacity[.];

at least some of [the] said cells having both at least one regular frequency and at least one super-reuse frequency, so that said at least one regular frequency is intended to serve primarily in cell boundary regions and said at least one super-reuse frequency is intended to serve primary in the vicinity of [the] a base station[.]; and

[means controlling] a controller which controls traffic load distribution in [the] a cell between said at least one regular and said at least one super-reuse frequency by [means of] intra-cell handovers induced by estimated interference on said at least one super-reuse frequency.

2. (Amended) [A] The cellular radio network as claimed in [Claim] claim 1, [characterized in that

the cause of] wherein a handover from a regular frequency to a super-reuse frequency [is] occurs at a [sufficiently good] predetermined interference level on [the] said super-reuse frequency, and

[the cause of] wherein a handover from a super-reuse frequency to a regular frequency [is] occurs when there is too poor an interference level on [the] said super-reuse frequency.

3. (Amended) [A] The system as claimed in [Claim] claim 1, [characterized in that

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the] wherein a BCCH frequency of the cell is [always] a regular frequency, and wherein a [that the] radio frequency assigned in call-setup or [a] handover from another cell is [always] a regular frequency.

4. (Amended) [A] The cellular radio network as claimed in [Claim] claim 1, [characterized in that it] further [comprises] comprising:

at least one microcell having only super-reuse frequencies, one of [which is] said super-reuse frequencies being a BCCH frequency, and

[that] call set-up in [the] a microcell is barred, and [the cellular network comprises means for controlling] said controller controls traffic load distribution between regular cells and [the] said microcell by [means of] inter-cell handovers induced by [the] an interference level in [the] said microcell.

5. (Twice Amended) [A] The cellular radio network as claimed in claim 1, comprising:

a mobile-assisted handover procedure in which [the] a mobile station [(MS)] measures [the] a signal receiving level of [the] a serving cell and [the] a signal level of [the] adjacent cells and forwards [the] said measurement results to [the] said handover controller [means] of [the] said cellular network, [characterized in that the] wherein said handover controller [means is adapted to estimate the] estimates an interference level on [the] said super-reuse frequencies of [the] said serving cell based on [the basis of the] said measurement results.

6. (Amended) [A] The cellular radio network as claimed in [Claim] claim 5, [characterized in that] wherein one or more adjacent cells have been assigned to each super-reuse frequency of [the] said serving cell, [the] said measured receiving level of [the] said adjacent cell being used [for estimating the] to estimate interference on said super-reuse frequency.

7. (Twice Amended) [A] The cellular radio network as claimed in [Claim] claim 5, [characterized in that the] wherein said measurement results of [the] said mobile station only concern a limited number of ambient cells, and that at least one reference cell has been assigned to at least one super-reuse frequency of [the] said serving cell from among said ambient cells, said reference cell having an interference profile of a [similar] type [as] similar to an interference profile of a more remote cell which is a potential source of interference on [the] said super-reuse frequency but cannot be directly measured by [the] said mobile station, and that [the] said handover controller [means is adapted to estimate the level of] estimates said interference level caused by said more remote cell on [the] said super-reuse frequency, using [the] said measured signal level of [the] said reference cell.

8. (Amended) [A] The cellular radio network as claimed in [Claim] claim 7, [characterized in that the] wherein a handover algorithm is adapted to estimate [the] a signal level of [the] an interfering cell by correcting [the] said measured receiving level of [the] said reference cell taking into account [the] a difference in [the] signal levels of [the] said reference cell and [the] an actual interfering cell.

9. (Amended) A method for increasing traffic carrying capacity in a cellular radio system, [characterized in that it comprises the steps of] comprising:

dividing [the] radio frequencies of [the] said cellular radio network into regular radio frequencies for which lower frequency reuse is utilized to achieve seamless overall coverage, and super-reuse frequencies to which higher frequency reuse is applied to provide a high traffic carrying capacity[.];

allocating to at least some [of the] cells of said cellular radio network both at least one regular frequency and at least one super-reuse frequency so that [the] said regular frequency is intended to serve primarily in cell boundary regions and [the] said super-reuse frequency is intended to serve [primarily] in [the] a vicinity of [the] a base station[.]; and

controlling traffic load distribution in [the] a cell between said at least one regular and said at least one super-reuse frequency by [means of] intra-cell handovers induced by estimated interference on said at least one super-reuse frequency.

10. (Amended) [A] The method as claimed in [Claim] claim 9, [characterized by] further comprising:

performing an intra-cell handover from a regular frequency to a super-reuse frequency when [the] said super-reuse frequency has a [sufficiently good] predetermined interference level[.]; and

performing a handover from a super-reuse frequency to a regular frequency when [the] said super-reuse frequency has too poor an interference level.

11. (Twice Amended) [A] The method as claimed in [Claim] claim 9, [characterized by] further comprising:

allocating a regular frequency as [the] a BCCH frequency of [the] said cell in each case[,]; and

assigning a regular frequency in call set-up or in a handover from another cell in each case.

12. (Twice Amended) [A] The method as claimed in [Claim] claim 9, [characterized by] further comprising:

measuring [the] a signal receiving level[, preferably also the] and quality[, of [the] a serving cell at [the] said mobile station[,];

measuring [the] said signal receiving level of [the] cells ambient to [the] said serving cell at [the] said mobile station[,];

forwarding [the] measurement results from [the] said mobile station to [the] said cellular radio network[,]; and

estimating [the] an interference level on [the] said super-reuse frequencies of said [the] serving cell based on [the basis of the] said measurement results.

13. (Amended) [A] The method as claimed in [Claim] claim 12, [characterized by] further comprising:

assigning one or more adjacent cells to each super-reuse frequency of [the] said serving cell, [the] said measured receiving level of the adjacent cell being used [for estimating the] to estimate said interference level on said super-reuse frequency.

14. (Twice Amended) [A] The method as claimed in [Claim] claim 12, [characterized by

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